C++ ASSIGNMENT

1.Ques : Given an m x n integer matrix matrix, if an element is 0, set its entire row and column to 0's.

You must do it in place.

Input :

111

101

111

Output :

101

000

101

Ans:
```cpp
#include<iostream>
#include<vector>
using namespace std;
int main(){
    int m;
    cout<<"Enter rows: ";
    cin>>m;
    int n;
    cout<<"Enter columns: ";
    cin>>n;
    vector<bool>rows(m,false);
    vector<bool> coloums(n,false);
    int arr[m][n];
    for(int i=0;i<m;i++){
        for(int j=0;j<n;j++){
            cin>>arr[i][j];
```

```cpp
        }
    }
    cout<<endl;
    for(int i=0;i<m;i++){
        for(int j=0;j<n;j++){
            if(arr[i][j]==0){
                rows[i]=true;
                coloums[i]=true;
            }
        }
    }
    for(int i=0;i<m;i++){      //0 1 2 0
        if(rows[i]==true){
            for(int j=0;j<n;j++){
                arr[i][j]=0;
            }
        }
    }
    for(int j=0;j<n;j++){      //0 1 2 0
        if(coloums[j]==true){
            for(int i=0;i<m;i++){
                arr[i][j]=0;
            }
        }
    }
    for(int i=0;i<m;i++){      //0 1 2 0
        for(int j=0;j<n;j++){
            cout<<arr[i][j]<<" ";
        }
        cout<<endl;
```

```
    }
    return 0;
}
```